SALTON SEA ADVISORY COMMITTEE MEETING

November 30, 2004
9:30 – 3:30
Palm Springs, CA

Welcome and Introductions

Mike Chrisman, Secretary for Resources, welcomed the Advisory Committee members and led introductions of those present (see attached list).

Updates from the Resources Secretary

Secretary Chrisman provided an overview of the November 4 Salton Sea meeting and reviewed the agenda for the day's meeting. The next Advisory Committee Meeting will be held on January 14, 2005, at the California Environmental Protection Agency building in Sacramento.

Public Comments

Several members of the audience, representing various local interests, provided comment. These comments are summarized below.

- There is support from the local community for the Salton Sea Authority's (SSA's) efforts, and the SSA's North Lake Alternative (also referred to as the Integrated Water Management Plan). The California Department of Water Resources (DWR) should consider this alternative in its current process.

- The federal government should be involved in the Salton Sea Ecosystem Management Plan process.

- No additional water transfers should be allowed.

- The Salton Sea should not be allowed to dry up.

- Air quality impacts, including impacts to human health, are important issues and should be considered.

- Inflows to the Salton Sea may change in the future as a result of various actions including projects in Mexico, potential future Part 417 reviews, increased irrigation efficiencies, changes in groundwater use, and as a result of the over-allocation of the Colorado River. The Ecosystem Management Plan should consider lower inflows to the Sea in the future.

- The Cascade Alternative proposed by the Imperial Group would result in a "water grab" similar to what happened in Owens Valley.

- Efforts to restore the Salton Sea have been on-going since the 1970s. DWR should use information and results from these prior studies.

Update on Project Schedule

Gwen Buchholz (CH2MHILL) noted that the initial draft No Action Alternative Report was provided to Advisory Committee members for comments. Work is underway to identify data gaps and develop conceptual alternatives. The identification of analytical tools and development of draft screening criteria will be completed shortly. Conceptual Alternatives will be covered at the January 14 Advisory Committee meeting.

Cumulative Impacts and Range of Potential Inflows

Ms. Buchholz provided an overview of the planned cumulative impact analysis. As part of that discussion, she described the variability of inflows to the Salton Sea and noted that a range of inflow conditions based on a series of "what if" questions will be considered in the analysis, this range will be used to help develop a project with long-term flexibility and sustainability, and to perform a sensitivity analysis for fatal flows. It was noted that there can be substantial changes in flows on the Colorado River that do not necessarily result in changes in inflow to the Sea. Ms. Buchholz requested that Advisory Committee members consider whether the cumulative impact analysis should consider a range of variability or whether a set of "bookend" inflow values should be used in the analysis. Members should submit any comments or suggestions for items to be considered to Committee's e-mail reflector (salton_sea@water.ca.gov).

Review of Geotechnical Work to Date

John Vrymoed (DWR) and Ms. Buchholz provided an overview of the geotechnical activities conducted to date.

Mr. Vrymoed noted that DWR has conducted a preliminary analysis of the feasibility of constructing a rock-filled barrier in the Salton Sea and has completed conceptual barrier design. The analysis and design are not specific to any alternative. He indicated that the design of a large structure in the Salton Sea is challenging due to the sea floor deposits or "fat clay" and the presence of numerous faults. Structures must be designed to withstand anticipated ground accelerations in the area.

The side slopes for a rock barrier were estimated using various water levels on each side of the barrier and the regional seismic information. Based on the analysis, the slopes required for stability would vary depending on the location in the Sea, with shallower slopes needed in the eastern portion of the Salton Sea. The barrier could be built on the existing Sea floor deposits and no dredging of foundation material would be

needed. Using dredged soils to construct the barrier is not recommended because it would likely result in instability during seismic events.

Mr. Vrymoed emphasized that the analysis was intended to determine the feasibility of constructing a rock-filled barrier at a programmatic level of detail. Additional analysis will be needed to refine the cost estimate. DWR will move forward with cost estimates for the barrier.

Using costs to construct the causeway at the Great Salt Lake and indexing those costs to current levels for illustrative purposes only, a rock-filled barrier at the Sea might cost approximately $8 per cubic yard of material used. This hypothetical estimate does not account for current market value of the rock around the Salton Sea, the additional distance to transport rock to the construction site, or the environmental permits and mitigation that would be required. Ultimately, costs for each alternative considered at the Salton Sea will depend on a number of factors including the amount of rock required, which is a function of the length and height of the barrier, transportation requirements, and costs of environmental mitigation.

Ms. Buchholz provided an overview of the quarry site analysis. The analysis assumed that approximately 40 million cubic yards of 4-foot diameter material would be needed. The initial analysis was limited to existing quarry sites within 50 miles of the Salton Sea or within 20 miles for undeveloped sites. Based on the analysis, eight potential sites were identified. Two sites are located on private lands and the remaining six sites are located on either Bureau of Land Management lands or Tribal lands. Specific quarry sites are under review now because of the large amount of material needed and the potential for extraction and transport of this material to result in impacts to air quality and biological resources. It was noted that the Torres-Martinez Tribe, with the Bureau of Indian Affairs, is conducting an analysis of the amount and type of available materials for a potential quarry on Tribal lands. The results of this analysis will be integrated into the Salton Sea Ecosystem Management Plan when they become available.

Salton Sea Authority (SSA) Request for State Bond Funds

Ron Enzweiler, SSA Executive Director, provided an overview of the SSA's revised request for $9.5 million in State bond funds (list of projects included with handouts) and requested the Committee's endorsement of the request at the February Wildlife Conservation Board meeting. Committee members briefly discussed some of the proposed projects, but the following concerns were expressed:

- Additional information on each item proposed for funding is needed. It was suggested that the SSA use the CALFED grant application as a model.

- Additional coordination with others is needed to reduce duplication of efforts. There is overlap with Quantification Settlement Agreement mitigation requirements and activities of the New River wetlands program. It was suggested

that the SSA coordinate with DWR and the U.S. Bureau of Reclamation (USBR) on the scope of each task.

- The scope of Task #3 should be revised to include a more comprehensive look at potential quarries and identification of the least cost source of material rather than limiting the analysis to a specific site on Torres-Martinez lands.

- The potential for other funding sources needs to be considered. Some projects may not qualify for funds under Proposition 50.

A few Committee members suggested that the Committee approve the request "in concept"; however, due to the concerns raised by other Committee members, the endorsement of the Committee was deferred to the January 14 meeting, where the SSA will provide more detail on the proposed projects. Secretary Chrisman requested that the SSA continue its efforts in working with various Committee members and DWR to address concerns and minimize overlapping efforts.

Joe Grindstaff, Chief Deputy Director of DWR, noted that DWR has approved the SSA's request to use approximately $1.6 million in unspent State General Fund monies from the 1999-2000 Member's Requests to implement the first phase of an odor abatement/water treatment program, conduct recreation and economic development studies related to the State's process, and conduct other studies in and around the Salton Sea.

Cascade Concept Overview

Mike Morgan, Dave Hornbeck, Rinus van de Ven, Jim Kelley, and Heidi Kuhn provided an overview of the Imperial Group's Cascade Concept. It was noted that the Cascade Concept is currently in the conceptual design stages and should not be considered as final. The Concept has the following key objectives: improve water quality; enhance the ecosystem; retain the existing shoreline; optimize the use of water; and, allow for future recreation activities. The Concept uses a series of low dikes to create a series of wetlands, ponds, and marine lakes that would provide habitat for birds, fish, and other aquatic species. The dikes would form four concentric water bodies in the Salton Sea and one hypersaline lake at the center of the Sea. The water bodies would vary in salinity with lowest salinity waters near the existing shoreline. Habitat "islands" would be created on or adjacent to the dikes and at various locations throughout the four water bodies. The dikes would be constructed using a core of dredged bottom sediments encased in a geotube fabric. Dredged bottom sediments also would be used to cover the geotubes and form the habitat islands. The fabric has a life span of approximately 150 years when not exposed to sunlight and 50 years when exposed to sunlight. Approximately 300 miles of dikes would be constructed.

Representatives of the Imperial Group also described the ecosystem benefits of the concept, anticipated urban growth in the Imperial Valley, and provided a perspective of the local farming community.

Potential Screening Criteria for Alternatives Development

Gwen Buchholz provided an overview of the development of screening criteria for the Salton Sea Ecosystem Management Plan. She noted that the screening criteria will be used to focus the development of the alternatives considered in more detail in the CEQA analysis. Ms. Buchholz suggested the following potential screening criteria.

- Consistent with Quantification Settlement Agreement and enabling legislation
- Maintain the Salton Sea for irrigation drainage – per Executive Order
- Consistent with Federal law
  - Migratory Bird Treaty Act
  - Others
- Protect Fish and wildlife
  - Cannot cause jeopardy to any species under state and federal laws
  - Cannot cause ecosystem health risk – anywhere
  - Provide sustainability of ecosystem
- Focus on Salton Sea Watershed
- Use of Available Technology
  - Need to be available for implementation in next 10 years?
  - Risk management of developing technology
- Flexibility
  - Range of inflows
  - Adaptive Management
- Design life
- Life-cycle costs

Advisory Committee Members recommended consideration of the following additions/changes to the suggested screening criteria.

- Protection of farming and the microclimate created by proximity to the Salton Sea
- Maintenance of beneficial uses in the Regional Water Quality Control Board's current Basin Plan
- Seismic activity
- Consistency with Colorado River water delivery contracts
- Wildlife improvement

Committee members should submit any additional comments or suggested screening criteria through the Committee's e-mail reflector.

QSA Implementation Status

An overview of the implementation of the QSA was provided by Elston Grubaugh of the Imperial Irrigation District (IID), Larry Purcell of the San Diego County Water Authority (SDCWA), Steve Robbins of the Coachella Valley Water District (CVWD), Dennis Underwood of the Metropolitan Water District of Southern California (MWD), and Kim Nicol of the Department of Fish and Game (DFG).

The Draft Coachella Valley Multi-Species Conservation Plan is currently available for public review. This document includes the mitigation requirements for the Coachella Canal Lining Project.

The joint powers authority (JPA) for administering QSA environmental mitigation funding has been established; SDCWA is providing the JPA's administrative support. The JPA has established its initial budget.

The IID/SDCWA water transfer has been implemented, and IID transferred 20,000 acre-feet to SDCWA in 2004 and intends to transfer 30 TAF in 2005. The fallowing program was oversubscribed for the first two years of program implementation. IID anticipates using its trust lands for fallowing in the future. The mitigation monitoring program is in place, and the pupfish surveys and selenium studies are beginning (handout provided). Discussions also are underway among the local agencies to reassign lead responsibility for preparation of the Natural Communities Conservation Plan to IID. DFG recently issued the California Endangered Species Act incidental take permit (2081 permit) for the IID/SDCWA Transfer.

IID has selected a consultant team for the design of the All-American Canal Lining Project. Construction of the canal lining project is anticipated to begin in January 2006 and be completed by the end of 2008.

The Inadvertent Overrun and Payback Policy is in place. The Interim Surplus Guidelines (ISG) are also in place, but surpluses are unlikely to occur in the near future due to the drought. The milestones for agricultural water use reduction identified in the ISG Record of Decision (ROD) will still need to be met as required in the Colorado River Water Delivery Agreement. The final documents for the Lower Colorado River Multi-Species Conservation Plan (LCRMSCP) should be released to the public shortly. A ROD for the LCRMSCP is expected to be signed in January 2005.

MWD is currently implementing the MWD/Palo Verde Irrigation District water, land management, crop rotation, and water supply program.

Summary of Science Review of SSA Preferred Conceptual Alternative

Doug Barnum (USGS) provided a brief summary of the review of the SSA's preferred conceptual alternative by a group of scientists convened by the Salton Sea Science Office. Dr. Barnum indicated that the clear message from scientists participating in the review was that selenium and air quality present substantial challenges for all restoration alternatives and that these issues must be adequately addressed. The SSA's proposed wetlands area in the south half of the current sea's footprint would present unacceptable selenium impacts. Because of the selenium issues, the scientists recommended that any freshwater habitats contemplated under ecosystem management alternatives should use Colorado River water instead of drain water as the source water. In addition, placement of gravel rather than use of water (i.e., shallow flooding) for mitigating air quality impacts would be preferred. He anticipated that the first draft of their review would be available in about 60 days.

Potential Availability of Analytical Tools

Ms. Buchholz provided an overview of the initial screening of analytical tools, including an overview of various physical, biological, and economic tools that are available. The analytical tools under consideration are intended to provide a numerical procedure to describe and compare alternatives and project impacts. Members' suggestions for additional analytical tools should be sent to the Committee's e-mail reflector.

Wrap Up / Future Meetings

The next Advisory Committee meeting will be held on January 14, 2005, at the California Environmental Protection Agency building in Sacramento.

Handouts

Copies of the following presentations and related materials:

- Project Schedule
- Cumulative Impacts – Range of Inflows to the Salton Sea
- Review of Geotechnical Work to Date
- Map of Potential Quarry Sites
- Proposition 50, Chapter 9, Colorado River
- List of projects and work plan developed by the SSA for funding consideration
- Development of Screening Criteria for Salton Sea Ecosystem Management Plan
- Preliminary List of Alternatives Considered in Previous Reports
- Environmental Cost Sharing, Funding, and Habitat Conservation Plan Development Agreement (from QSA agreements)
- Selenium Update – November 2004 (IID's summary of QSA-related mitigation activities)
- Initial Screening of Analytical Tools

ATTENDANCE

Advisory Committee Members or Alternates Present:

Steve Birdsall, Imperial County Air Pollution Control District
Fred Cagle, Sierra Club
Celeste Cantu, State Water Resources Control Board
Bill DuBois, California Farm Bureau Federation
Bill Gaines, California Waterfowl Association
Elston Grubaugh, Imperial Irrigation District
Rick Hoffman, Riverside County
Gary Johnson, Regional Water Quality Control Board
Al Loya, Torres-Martinez Desert Cahuilla Indians
Mark Nichols, Cabazon Band of Mission Indians
Lisa Northrop, Bureau of Indian Affairs
Sylvia Oey, Air Resources Board
Larry Purcell, San Diego County Water Authority
Tom Raftican, United Anglers of Southern California
Steve Robbins, Coachella Valley Water District
Vincent Signorotti, Geothermal Energy Association
Dennis Underwood, The Metropolitan Water District of Southern California
Mike Walker, U.S. Bureau of Reclamation
Dan Walsworth, U.S. Fish and Wildlife Service
John Wohlmuth, Coachella Valley Association of Governments
Gary Wyatt, Imperial County